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REMARKS

Reconsideration of the application as amended is requested.

The Examiner's remarks and the cited references have been received and carefully considered. Original claims 1-10 have been canceled without prejudice and claims 11-13, 15, 16, 18-23, 25, 26 and 28-30 have been amended.

In response to the Examiner's claim objections, placement of the word "concentric" has been changed in claims 11 and 21 to indicate that the "first member is positioned concentrically within the second member". Applicant believes that these amendments overcome the Examiner's objections to original claims 11 and 21.

The Examiner rejected original claims 11-30 under 35 U.S.C. § 102(b) as being anticipated by the Omiya et al Patent Publication No. 2002/0017785. The Examiner also rejected original claims 16, 20, 26 and 30 under 35 U.S.C. § 103(a) as being unpatentable over the subject Omiya et al reference. For those reasons set forth in detail below, Applicant asserts that the pending claims, as amended herein, are patentable over the Omiya et al reference, as well as the other references of record.

Original claim 11 has been amended to more clearly define the recited "couplers", and now specifically indicates that the same have "ungrooved inner surfaces without fluid communication with the radially directed bores of the first member". Furthermore, claim 1 has been amended to indicate that the couplers also include "opposite faces which abuttingly engage the end surfaces of the segments to transmit torque between the segments without rigid connection therebetween, and thereby accommodate for some misalignment between the

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segments". The couplers thus defined in independent claim 11 provide a separate interface between the segments, so that any misalignment of the segments does not result in binding or ceasing of the fluid rotary union, which is a common problem experienced with prior art fluid rotary unions, such as that disclosed in the Omiya et al patent. In the Omiya et al reference, the joint housing sections 11-17 include an internal groove which is in fluid communication with a radially directed bore in the shaft. The Omiya et al joint housing sections 11-17 are stacked immediately adjacent to one another in an abutting relationship, with no spacers, couplers or any other structure disposed between the housing sections 11-17. The housing sections 11-17 of Omiya et al are rigidly interconnected by axially extending bolts 18, 19 and 20. As a result of this construction, the Omiya et al device is not designed to permit any substantial flexure to accommodate bending of the shaft or the housing section during operation. In contrast to the Omiya et al fluid rotary union, Applicant's claimed rotary union provides couplers between the segments which are capable of transmitting torque without rigid connection, and thereby accommodate for some misalignment between the segments, yet still maintain structural integrity. Applicant's claimed couplers do not have a grooved inner surface, and are not in fluid communication with the radially directed bores of the shaft. Rather, the purpose of Applicant's claimed couplers is to permit some flexure along the length of the shaft, and not to provide fluid communication between the first and second members.

Furthermore, in the Omiya et al rotary joint, the first joint housing section 11 is not attached directly to the shaft, but rather is bolted to the second housing section 12, which is in turn rigidly connected to joint housing sections 13, 14, 15, 16 and 17. This is in contrast to

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the rotary union set forth in amended claim 11, wherein an end plate is operably connected with the first member, and serves to retain the segments and the couplers in a stacked relationship along the shaft.

The remaining references of record have been carefully examined, and none teach or suggest those unique features noted above as lacking in the Omiya et al patent.

Claims 12-20 depend directly or indirectly from claim 11, and recited additional structure and feature which further distinguish the same from the art of record. For example, amended claim 16 depends directly from claim 11, and indicates that "the first member acts bearingly against the segments". There is no disclosure or structure in the Omiya et al reference indicating that the subject device is capable of withstanding any bearing force applied by the shaft to the housing sections. Furthermore, claim 18 recites that "the opposite end surface of at least one of the segments on the opposite faces of at least an adjacent one of the couplers includes a slot and mating lug to rotatably interconnect the same. None of the references of record teach or suggest a slot and mating lug connection between couplers and segments in a fluid rotary union device.

Independent claim 21 is similar to independent claim 11 discussed above, except that it recites a "retainer" operably connected with the first member, instead of the "end plate" recited in independent claim 11. Independent claim 21 has been amended in a fashion similar to independent claim 11 discussed above, and is believed to be patentable over the Omiya et al patent, as well as the other cited references, for those reasons already of record.

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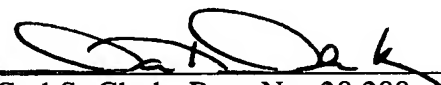
Claims 22-30 depend directly or indirectly from independent claim 22 discussed above, and add additional structure and feature thereto. These claims are also believed to be patentable over the references of record for those reasons set forth above.

Applicant submits that the cited references do not teach or in any way suggest the unique fluid rotary union set forth in the amended claims. Applicant's invention is directed to problems which are not addressed by any of the prior art references, and solves problems and technical obstacles experienced in the prior art, thereby representing a significant advancement in the art. It is therefore respectfully submitted that claims 11-30 should be allowed, since the references, taken singularly or in any combination, do not teach the unique fluid rotary union set forth therein. A notice to this effect is solicited.

Respectfully submitted,

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